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(54) Title: ELECTROLUMINESCENT DISPLAYS

(57) Abstract: Certain materials are electroluminescent, and this electroluminescent effect has been used in the construction of backlights for displays. Such a backlight commonly consists of a transparent front layer (11) known as the substrate carrying over its rear face a transparent electrically-conductive film (12) forming the backlight's front electrode and covered by a layer of electroluminescent/phosphor material (13) over the rear face of which is a high-dielectric layer (16) bearing on its rear face a conductive film (17) forming the back electrode. The whole is positioned behind a mask (18) that defines whatever characters the display is to show. This use of a mask has some disadvantages, some of which can be overcome by utilising an array of suitably shaped individual electrodes (21) instead of a continuous one, and by shaping the electroluminescent material itself in discrete areas (43) each tightly matching in shape and size the relevant individual shaped back electrode (21). This latter, however, itself has drawbacks, for the colour of the phosphor commonly contrast with the colour of the surrounding insulating material, so that the discrete areas of phosphor may be visible under ambient light even when in their inactivated, "off", state. The invention deals with this problem by proposing that there be modified - or apparently modified - the colour/reflectivity of one or other (or, indeed, both) of the phosphor (43) and the surrounding insulator material (16) so as to 2match" that of the other, and thus cause the phosphor and insulator material to blend with, and so be less distinguishable from, each other.

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